



Terms of Reference

Technology Needs Assessment (TNA) project in Trinidad and Tobago

Assistant TNA Coordinator Consultant

1. Background

The current Global Technology Needs Assessment (TNA) project, deriving from window (i) of the Strategic Program on Technology Transfer, is designed to support countries to carry out improved Technology Needs Assessments within the framework of the United Nations Framework Convention on Climate Change (UNFCCC).

The purpose of the TNA project is to assist participant developing country Parties identify and analyse priority technology needs, which can form the basis for a portfolio of environmentally sound technology (EST) projects and programmes to facilitate the transfer of, and access to, the ESTs and know-how in the implementation of Article 4.5 of the UNFCCC Convention. Hence TNAs are central to the work of Parties to the Convention on technology transfer and present an opportunity to track an evolving need for new equipment, techniques, practical knowledge and skills, which are necessary to mitigate GHG emissions and/or reduce the vulnerability of sectors and livelihoods to the adverse impacts of climate change. The main objectives of the project are:

1. To identify and prioritize through country-driven participatory processes, technologies that can contribute to mitigation and adaptation goals of the participant countries, while meeting their national sustainable development goals and priorities (TNA).
2. To identify barriers hindering the acquisition, deployment, and diffusion of prioritized technologies.
3. To develop Technology Action Plans (TAP) specifying activities and enabling frameworks to overcome the barriers and facilitate the transfer, adoption, and diffusion of selected technologies in the participant countries.

Further, the TNA process will develop Concept Notes for attracting funding to implement selected technologies in priority areas of national relevance.



A consultant, currently being recruited, will carry out the bulk of the substantive work of the TNA in Trinidad and Tobago. The TNA will consider technologies for both climate change mitigation focussing on electric power generation, transport and industry) and climate change adaptation (treated holistically as building climate change resilience into development), under the direct supervision of the National TNA Coordinator.

In addition, a part-time Assistant TNA Coordinator Consultant (ATCC) is required for the duration of the project to execute and supervise the implementation of activities under the TNA project. He/she will coordinate and facilitate the implementation of the project under the supervision of and reporting to the national TNA Coordinator.

The ATCC assignment will be completed by the end of November 2020.

The general and key tasks of the ATCC are described below.

2. General Tasks

The ATCC will work in close collaboration with the TNA coordinator and the national TNA team. His/her overall task is to support the entire TNA process – ranging from engaging with the stakeholders, identification of technology needs, its prioritisation and assessment, to the development of national TAPs. In-line with domestic and global objectives, the consultant will be responsible for providing the national TNA teams with the process-related and methodological/technical advisory services needed for conducting TNAs, preparing the Barrier Analysis and Enabling Framework (BAEF) report and developing Technology Action Plans (TAPs) at the country level. The TAP will outline essential elements of an enabling framework for technology transfer consisting of market development measures, institutional, regulatory and financial measures, and human and institutional capacity development requirements. It will also include a detailed plan of actions in order to implement the proposed policy measures and estimate the need for external assistance to cover additional implementation costs.

The ATCC will assist the TNA Coordinator in applying a participatory approach to the TNA process, involving a wide range of stakeholders while ensuring a multi-sector and multi-disciplinary scope. Moreover, the ATCC will be tasked with communicating on behalf of the National TNA



Coordinator with the national TNA team members, outreach to stakeholders, formation of networks, information acquisition, and coordination and communication of work products. In addition, his/her role will consist in assisting in the coordination and implementation of the project, in assuring the quality of products delivered by the Expert Consultant and in drafting and editing planned reports in the framework of the project.

In collaboration with the national TNA team, the National TNA Coordinator, and the Expert Consultant, the ATCC will be responsible for the timely provision of inputs and delivery as set in Annex 1. These tasks include *inter-alia*:

- (a) Organising consultative stakeholders meetings and workshops (inception, TNA validation, TAP validation, national dissemination and donor engagement event),
- (b) Developing a detailed draft work plan
- (c) Supporting the Expert Consultant in identifying and prioritizing technologies for mitigation and adaptation through a participatory process with a broad involvement of relevant stakeholders, including;
 - i. invite relevant stakeholders to project workshops,
 - ii. identify local institutions that can supply relevant data and/or inputs from local experts.
- (d) Communicating with the Expert Consultant on a regular basis to ensure that the analytical work match the project objectives and that all project deliverables are completed on time. This also includes supporting and overseeing the TNA team and the Expert Consultant in the process of analysing how the prioritized technologies can be implemented in the country and how implementation circumstances could be improved by addressing the barriers and developing an enabling framework based, *inter-alia*, on undertaking of local market and other assessments;
- (e) Supporting and overseeing, and make sure deliverables are submitted on time, the Expert Consultant in preparation and finalization of TNA, BAEF and TAP reports and final project closure report for the country.
- (f) Supporting the Expert Consultant in preparing working papers and other TNA-related documents as may be required to ease the consultative process and harnessing inputs from stakeholders during meetings, workshops, amongst others.



- (g) Provision of any other inputs, as may be required, relevant to the TNA process and output targeted as may be requested by the TNA Coordinator, the UNEP DTU Partnership (UDP, Denmark), the TNA regional centre and the national Project Steering Committee.

The ATCC will be required to follow best practices, guidelines, methodologies and technical guidance available through the UDP and other approved sources.

The following table provides an overview of the key tasks to be conducted by the ATCC:

3. Key Tasks

	Tasks	Deliverables	Timeframe	Additional Remarks
1.	<p>Support identification of priority technologies for mitigation and adaptation in the prioritised sectors</p> <p>Review of the existent national documents (e.g. NDC, NAP, National Communications, Energy plans, previous TNA, NES, NEP, NEAP, etc.).</p> <p>In close collaboration with the TNA team, the Assistant TNA Coordinator consultant will support the Expert Consultant in the following:</p> <ul style="list-style-type: none"> • constitution of working groups consisting of technical experts and practitioners within each of these sectors. • identification of relevant mitigation and adaptation technologies through a participatory process. • prioritization of the selected technologies based on a multi-criteria analysis 	1.Portfolio of technologies for mitigation and adaptation	As per work plan	Detailed methodological guidelines for prioritizing technologies will be provided at a TNA regional capacity building workshops, in which the Expert Consultant and the ATCC participate.
2.	<p>Validation of the reports on priority technologies (TNA reports)</p>	2. TNA report, containing a prioritized list of technologies for		Outline for TNA report will be shared by UDP at the TNA regional capacity building workshop.

	Tasks	Deliverables	Timeframe	Additional Remarks
	The Expert Consultant will prepare TNA reports on priority technologies and submit these to the Assistant TNA Coordinator. The Assistant TNA Coordinator consultant should ensure that the TNA reports are validated by the TNA Coordinator, the TNA team and the TNA Steering Committee.	mitigation and adaptation and describing the process followed, based on the format agreed for the project.		
3.	Support development of Barrier Analysis and Enabling Framework report (BAEF) Supervise and support the works of the Expert Consultant in the evaluation of the market, the analysis of barriers and the identification of enabling frameworks for the development, deployment and diffusion of priority technologies. <ul style="list-style-type: none"> • Support and overview the work of the Expert Consultant in the analysis of the evaluation of the barriers to development, deployment and diffusion of priority technologies and of advantageous frameworks to overcome obstacles identified for identified technologies. • Assure that products delivered by the Expert Consultant are homogeneous and consistent with the requirements of the TAPs. 	3. BAEF report for the deployment and diffusion of priority technologies, based on format agreed for the project.		Outline for TNA report will be shared by UDP at the 2nd regional capacity building workshop. The Assistant TNA Coordinator consultant and the Expert Consultant will participate in a capacity building workshop in the field of barrier analysis and enabling frameworks.

	Tasks	Deliverables	Timeframe	Additional Remarks
	<ul style="list-style-type: none"> Assure the quality of products delivered by the Expert Consultant. 			

	Tasks	Deliverables	Timeframe	Additional Remarks
4.	<p>Support development of Technology Action Plans (TAPs)</p> <p>Based on the work previously delivered by the Expert Consultant, the ATCC, with the assistance of the TNA committee, will support the development of TAPs for deployment and diffusion of prioritised technologies in the country.</p> <p>The TAP will be validated in a workshop and approved at the level of the TNA Steering Committee, following incorporation of stakeholder inputs and finalisation.</p>	4. TAPs for each prioritised technology based on format agreed for the project		Template for the TAP will be shared by UDP with the ATCC and the Expert Consultant at the regional capacity-building workshop.
5.	<p>Support development of sector advocacy and policy briefs (one per sector) and organise dissemination event</p> <p>Based on the work previously delivered in the TNA project, the ATCC will</p> <ul style="list-style-type: none"> • support the Expert Consultant in preparing targeted briefs and facilitate their dissemination • disseminate the briefs to the relevant stakeholders 			

	<ul style="list-style-type: none"> in collaboration with the TNA coordinator, organise one national TNA dissemination and donor-engagement event 			
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4. Basic Documents

- Step-by-step guide for countries conducting a Technology Needs Assessment (UDP, 2015)
- Hands-on guidance to multi criteria analysis (MCA) and the identification and assessment of related criteria. Available for adaptation and mitigation respectively (UDP, 2015)
- Barrier and enabling frameworks guidebook (UDP, 2015)
- Enhanced implementation of Technology Action Plans (TAPs) guidance (UNFCCC and UDP, 2017)
- Good practices for the evaluation of technological needs (report of UNFCCC workshop, 2007)
- NDC, National Communications, Energy plans, NAP, etc.

5. Qualifications

The ATCC should possess the following qualifications:

- a) At least a postgraduate degree in environmental management or climate-related fields
- b) Solid work experience in environment or climate change mitigation and adaptation-related fields
- c) Strong experience with the local context of the country and well established local networks

6. Profile and Skills

The ATCC should have strong inter-personal and verbal communication skills, good coordination and facilitation skills, and possess proven analytical capabilities, as well as excellent writing skills. The ATCC should have good knowledge of - and experience with - climate change strategies, technologies and policies at the national level. More specifically he/she should be familiar with national development objectives and sector policies, have overall insights in climate change science, and potential climate change impacts, as well as mitigation and adaptation needs for the country.

7. Working Arrangement



The ATCC will be contracted directly by the UNEP DTU Partnership (UDP) on a part-time basis, and will be required to be available for the performance of the tasks and delivery of the required outputs. He /She will be required to be available for the timely delivery of milestones relevant to the specified tasks over the duration of the project, as required by the TNA Coordinator.

8. Language

All working papers, draft reports and Final Report should be prepared and submitted in soft copies in English.

9. Intellectual Property Rights

All information, results and products, whether tangible or intangible, resulting from the project will be considered as the property of the national TNA coordinating entity, and the UNEP DTU Partnership.